IN THE CLAIMS

Please amend the claims as follows:

Claim 1. (Original) A method for modifying a surface of an interlayer insulating film that is formed by applying a coating solution on a substrate to form a coating film, and sintering the coating film at a predetermined temperature, the method comprising the steps of:

heating an inside of a reaction chamber that contains a substrate to a predetermined temperature; and

modifying a surface of the interlayer insulating film by supplying an oxidizing gas into the reaction chamber.

Claim 2. (Original) The method for modifying a surface of an interlayer insulating film according to claim 1, wherein

the oxidizing gas is any one of ozone, water vapor, oxygen, or a mixed gas of hydrogen and oxygen.

Claim 3. (Original) The method for modifying a surface of an interlayer insulating film according to claim 2, wherein

the predetermined temperature is in a range of from 250°C to 600°C; and

the oxidizing gas is ozone.

Claim 4. (Original) The method for modifying a surface of an interlayer insulating film according to claim 2, wherein

the predetermined temperature is in a range of from 250°C to 600°C; and

the oxidizing gas is a mixed gas of hydrogen and oxygen.

Claim 5. (Original) The method for modifying a surface of an interlayer insulating film according to any one of claims 1 to 4, wherein

during the step of modifying a surface of the interlayer insulating film, the surface of the interlayer insulating film is modified such that a surface energy of the interlayer insulating film is at least 80 mN/m.

Claim 6. (Currently Amended) The method for modifying a surface of an interlayer insulating film according to any one of claims 1 to ~~5~~ 4, wherein

during the step of modifying a surface of the interlayer insulating film, the surface of the interlayer insulating film is modified such that a surface contact angle of water on the surface of the interlayer insulating film is less than 40°.

Claim 7. (Currently Amended) The method for modifying a surface of an interlayer insulating film according to any one of claims 1 to ~~6~~ 4, wherein

the interlayer insulating film is an interlayer insulating film of a low dielectric constant.

Claim 8. (Original) The method for modifying a surface of an interlayer insulating film according to claim 7, wherein

the interlayer insulating film of a low dielectric constant is formed of a coating solution including polysiloxane having an organic functional group.

Claim 9. (Original) An apparatus for modifying a surface of an interlayer insulating film that is formed by applying a coating solution on a substrate to form a coating film, and sintering the coating film at a predetermined temperature, the apparatus comprising:

a reaction chamber that contains the substrate;

a heating unit that heats an inside of the reaction chamber to a predetermined temperature;

an oxidizing gas supplying unit that supplies an oxidizing gas into the reaction chamber; and

a controller that controls the heating unit and the oxidizing gas supplying unit.

Claim 10. (Original) The apparatus for modifying a surface of an interlayer insulating film according to claim 9, wherein

the oxidizing gas is any one of ozone, water vapor, oxygen, or a mixed gas of hydrogen and oxygen.

Claim 11. (Original) The apparatus for modifying a surface of an interlayer insulating film according to claim 10, wherein

the predetermined temperature is in a range of from 250°C to 600°C; and

the oxidizing gas is ozone.

Claim 12. (Original) The apparatus for modifying a surface of an interlayer insulating film according to claim 10, wherein

the predetermined temperature is in a range of from 250°C to 600°C; and

the oxidizing gas is a mixed gas of hydrogen and oxygen.

Claim 13. (Original) The apparatus for modifying a surface of an interlayer insulating film according to any one of claims 9 to 12, wherein

the controller controls the heating unit and the oxidizing gas supplying unit such that a surface energy of the interlayer insulating film is at least 80 mN/m.

Claim 14. (Currently Amended) The apparatus for modifying a surface of an interlayer insulating film according to any one of claims 9 to ~~13~~ 12, wherein

the controller controls the heating unit and the oxidizing gas supplying unit such that a surface contact angle of water on the surface of the interlayer insulating film is less than 40°.

Claim 15. (Currently Amended) The apparatus for modifying a surface of an interlayer insulating film according to any one of claims 9 to ~~14~~ 12, wherein

the interlayer insulating film is an interlayer insulating film of a low dielectric constant.

Claim 16. (Original) The apparatus for modifying a surface of an interlayer insulating film according to claim 15, wherein

the interlayer insulating film of a low dielectric constant is formed of a coating solution including polysiloxane having an organic functional group.